

TRANSLATION

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PCT2186HHilg	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2004/013778	International filing date (<i>day/month/year</i>) 03.12.2004	Priority date (<i>day/month/year</i>) 05.12.2003
International Patent Classification (IPC) or national classification and IPC G05B19/042, H02H9/00		
Applicant COOPER INDUSTRIES, INC.		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>1</u> sheets, as follows: <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/013778

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-9 as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. 2-16 as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1 received by this Authority on 20.09.2005 with letter of 20.09.2005
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1/3-3/3 as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/013778

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1.	Statement		
	Novelty (N)	Claims <u>1-16</u>	YES
		Claims _____	NO
	Inventive step (IS)	Claims _____	YES
		Claims <u>1-16</u>	NO
	Industrial applicability (IA)	Claims <u>1-16</u>	YES
		Claims _____	NO
2.	Citations and explanations (Rule 70.7)		
1.	Reference is made to the following documents:		
	<p>D1: JOHANNSMEYER U: "Fieldbus for process automation in hazardous locations-actual developments" INTERNATIONAL CONFERENCE ON EXPLOSION SAFETY IN HAZARDOUS AREAS (CONF. PUBL. NO. 469), 1999, pages 61-67, XP002317460 LONDON, UK ISBN: 0-85295-723-3.</p> <p>D2: DE 199 10 409 A1 (HARTMANN & BRAUN GMBH & CO. KG) 18 November 1999 (1999-11-18)</p> <p>D3: US 2002/097031 A1 (COOK WARREN E ET AL) 25 July 2002 (2002-07-25).</p>		
2.	The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claims 1-16 does not involve an inventive step within the meaning of PCT Article 33(3).		
2.1	Document D1 is considered the prior art closest to claim 1. It discloses (the references between parentheses relate to D1):		

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	<p>a data transmission device (figure 6) having a process master computer, a data adaptation device within the meaning of the present application (remote I/O) and field devices connected thereto. Document D1, figure 5, likewise discloses a data transmission device having a segment coupling which functions as a data adaptation device, and a supply device (auxiliary supply) and a data distribution device (fieldbus distributor).</p> <p>However, figure 5 of document D1 does not disclose that the data adaptation device and the associated supply devices are protected against explosion. In addition, document D1 does not disclose that the supply device is connected to the data distribution unit via an explosion-protected line, nor does document D1 disclose that the data distribution unit has a barrier device for limiting the amount of energy supplied. Owing to the configuration specified in claim 1, a plurality of field devices can be connected to each electrical circuit.</p> <p>2.2 Document D2 discloses a distribution device (figure 1: 11) in the same configuration as in document D1 (figure 5). The distribution device contains a barrier (see document D2, figure 2), as specified in claim 1. A person skilled in the art looking for precise instructions on how to configure the data distribution device according to document D1 in the area at risk of explosion, would find in document D2 a version having an</p>

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	<p>integrated barrier.</p> <p>Moreover, a person skilled in the art would choose, according to the circumstances of the specific application, an explosion-protected version of the data adaptation device and the associated supply device, for example if these devices also have to be mounted in the area at risk of explosion (see also document D1, figure 6, and page 66, left-hand column).</p> <p>2.3 The solution to this problem, as proposed in claim 1 of the present application, therefore does not involve an inventive step (PCT Article 33(3)) relative to the combination of .</p> <p>2.4 Dependent claims 2-16 contain no features which, combined with the features of any claim to which they refer, meet the PCT requirements for inventive step.</p> <p>3. The application does not meet the requirements of PCT Article 6 because claim 1 is not clear.</p> <p>3.1 Claim 1 is not clear. In particular the wording in lines 4-6 "... wherein the data transmission device the process master computer (2) and connected to same by a bus system (3) connected field device (4), ..." does not make sense.</p> <p>3.2 It is further unclear whether claim 1 refers only to a data transmission device consisting of a data</p>

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	<p>adaptation device and a data distribution unit or whether the device also comprises the field device and a process master computer (PCT International Preliminary Examination Guidelines chapter III-4.8a). Moreover, it is not clear whether or not the features of the field devices defined in claim 1 restrict the scope of protection of claim 1 (the field devices have a barrier device if the barrier is not contained in the data distribution device).</p> <p>3.3 It is also not clear from claim 1 which part of the data transmission device is connected to the process master computer and which part is connected to the field devices. Since in addition the terms "data distribution device" and "data adaptation device" are very vague, the scope of protection sought in claim 1 encompasses configurations which are not meaningful and not intended. Consequently, claim 1 is not fully supported by the description.</p>